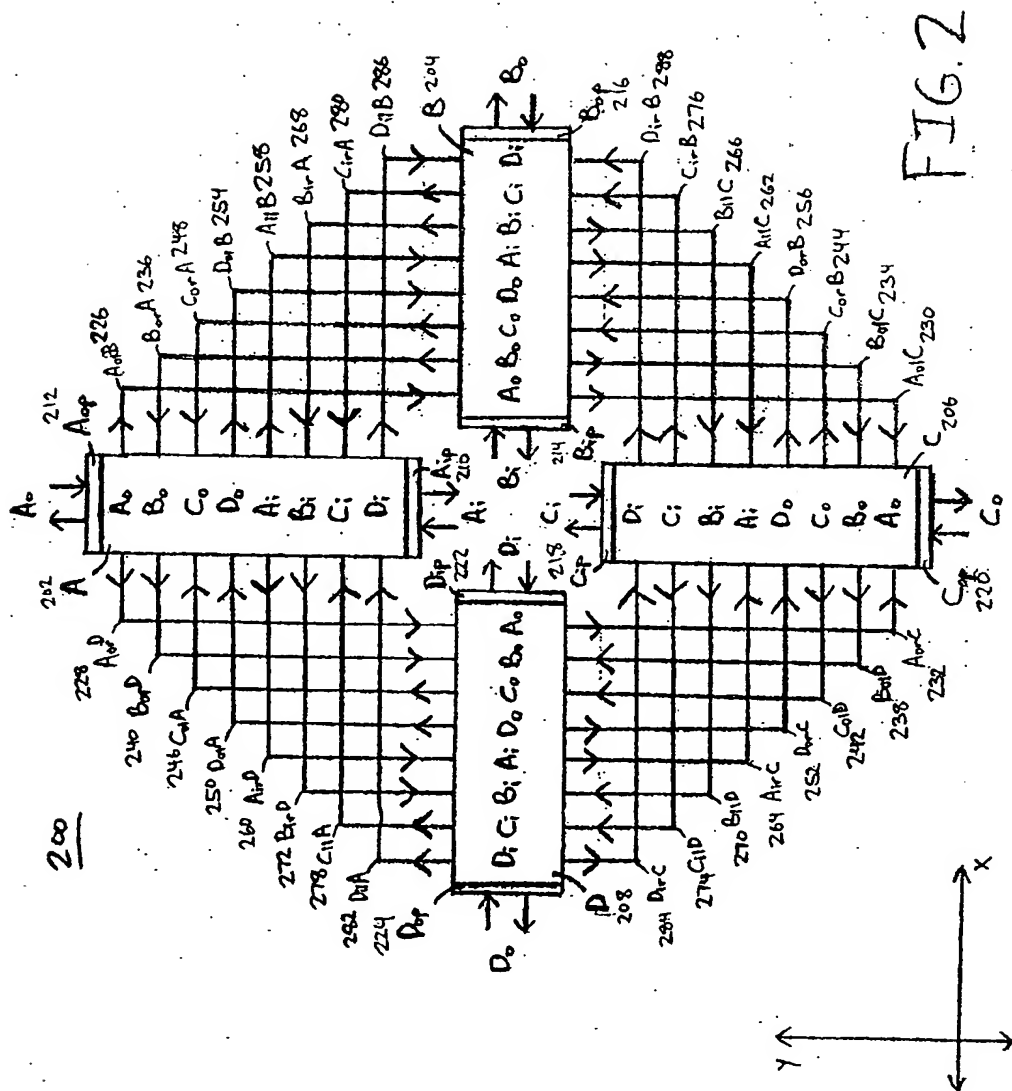


FIG.1



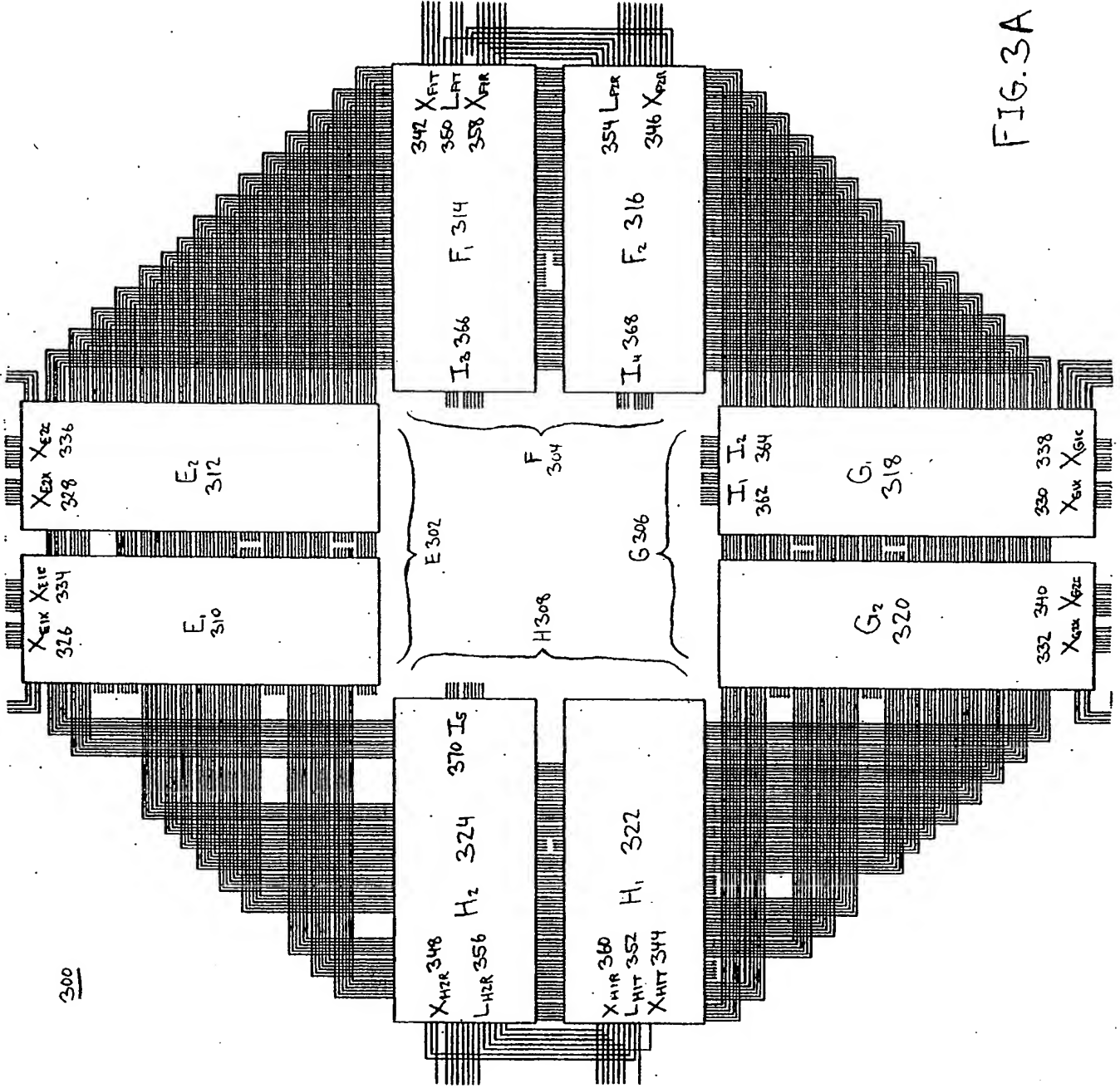


FIG. 3A

375



FIG. 36

385

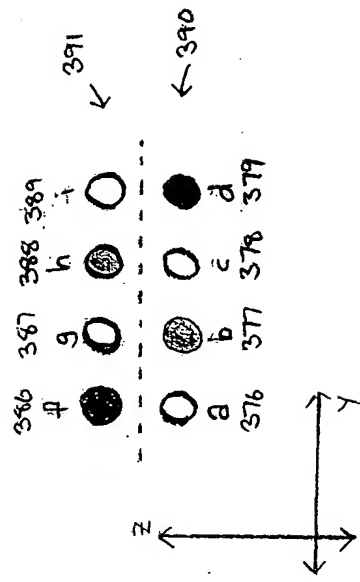


FIG. 3C

395

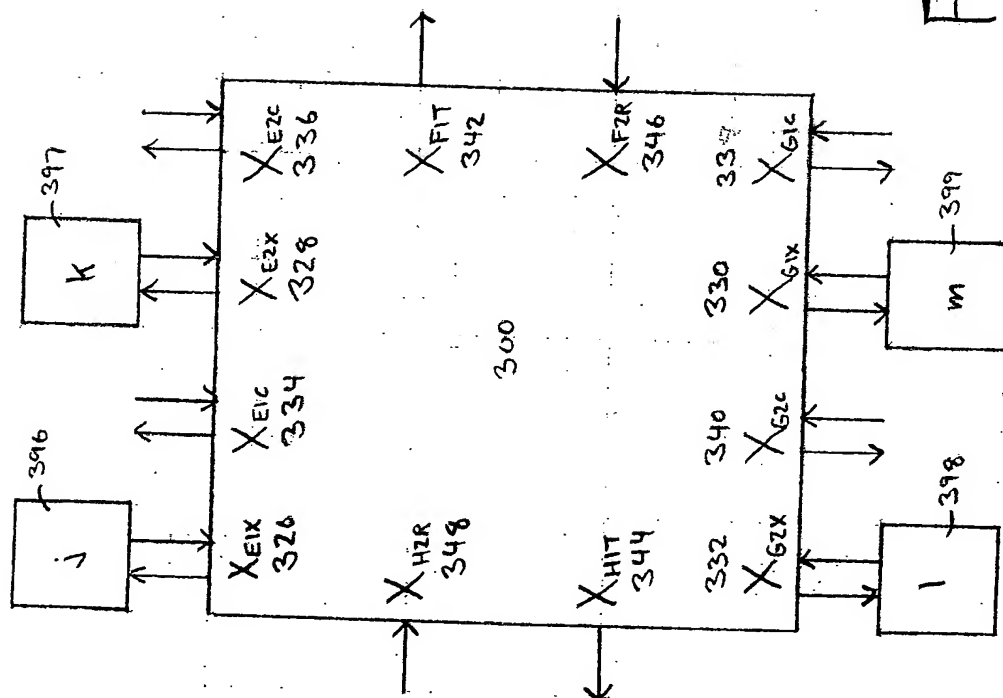


FIG. 3D

FIG. 4

TABLE 400

XAUI Protocol		
Received From Out of Bus	Communicated Within Bus	Transmitted to Out of Bus
40 data bits	40 data bits	80 data bits
4 link bits	4 link bits	
4 lock bits	4 lock bits	
4 clock bits	4 clock bits	4 clock bits
4 fast clock bits	4 fast clock bits	
1 CLOCK MODE SELECT bit	1 CLOCK MODE SELECT bit	

CDL Protocol		
Received From Out of Bus	Communicated Within Bus	Transmitted to Out of Bus
40 data bits	40 data bits	80 data bits
4 link bits	4 link bits	4 link bits
4 lock bits	4 lock bits	4 lock bits
4 clock bits	4 clock bits	4 clock bits
4 fast clock bits	4 fast clock bits	
1 CLOCK MODE SELECT bit	1 CLOCK MODE SELECT bit	

XGMII Protocol		
Received From Out of Bus	Communicated Within Bus	Transmitted to Out of Bus
40 data bits	80 data bits	40 data bits
4 lock bits	4 lock bits	
4 clock bits	4 clock bits	4 clock bits
3 MODE SELECT bits		
1 DIFFERENTIAL CLOCK MODE SELECT bit	1 CLOCK MODE SELECT bit	
		4 output enable bits

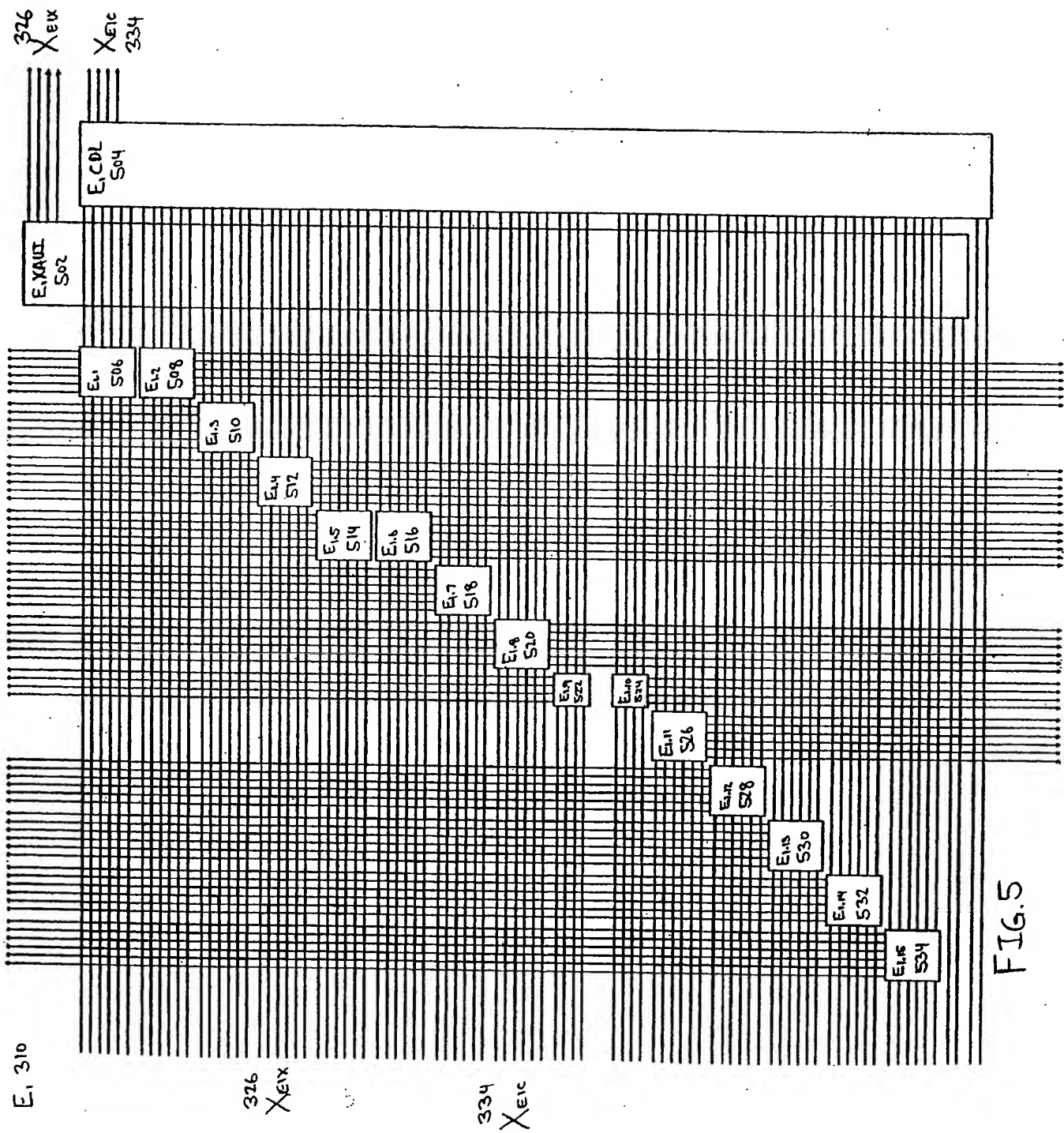


FIG. 5

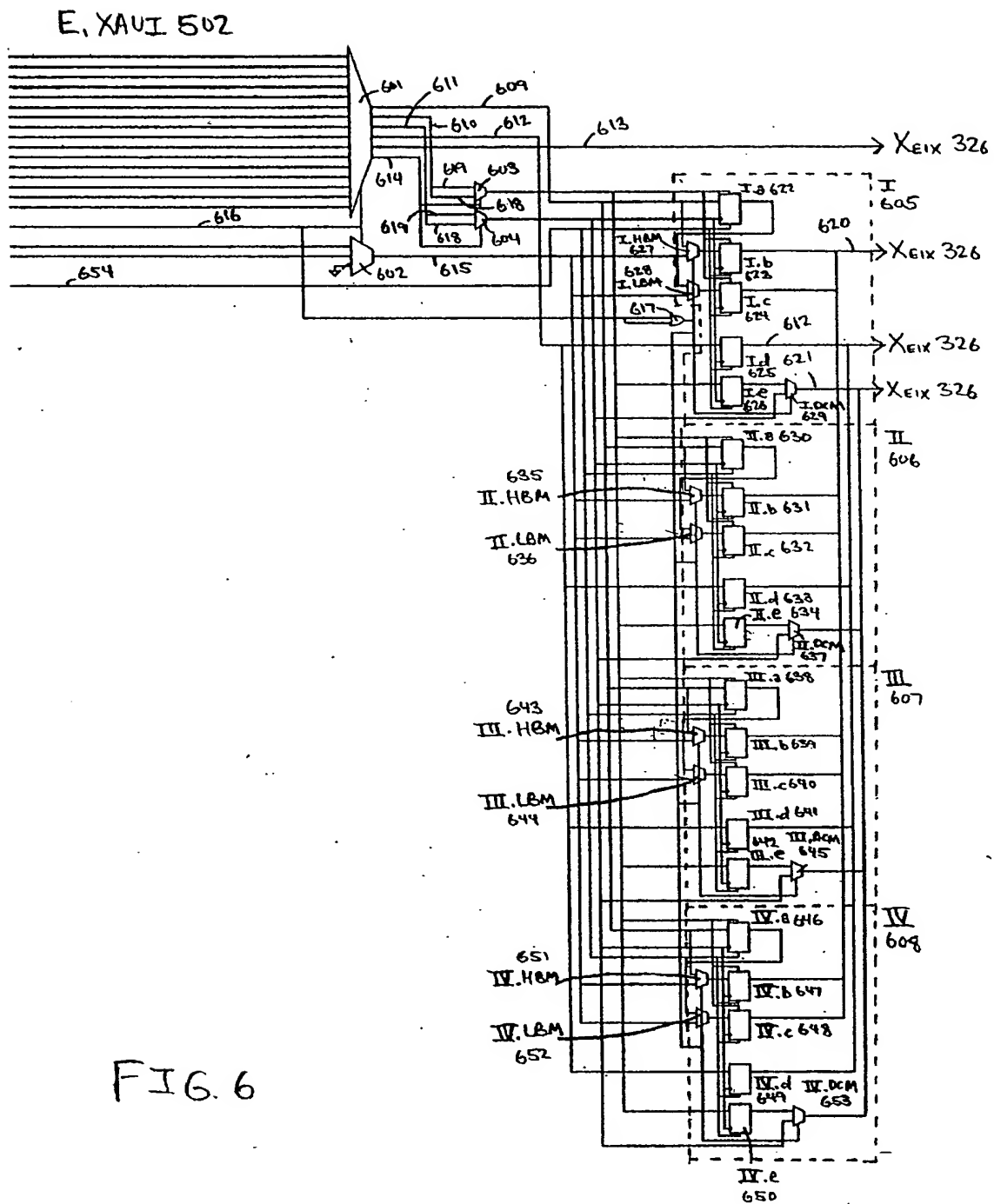


FIG. 6



E<sub>1.1</sub> 506

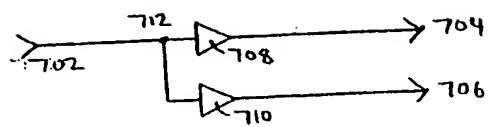


FIG. 7

E<sub>1.4</sub> 516

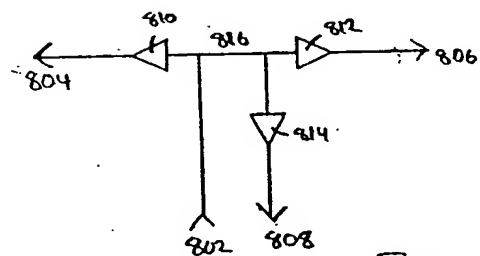


FIG. 8

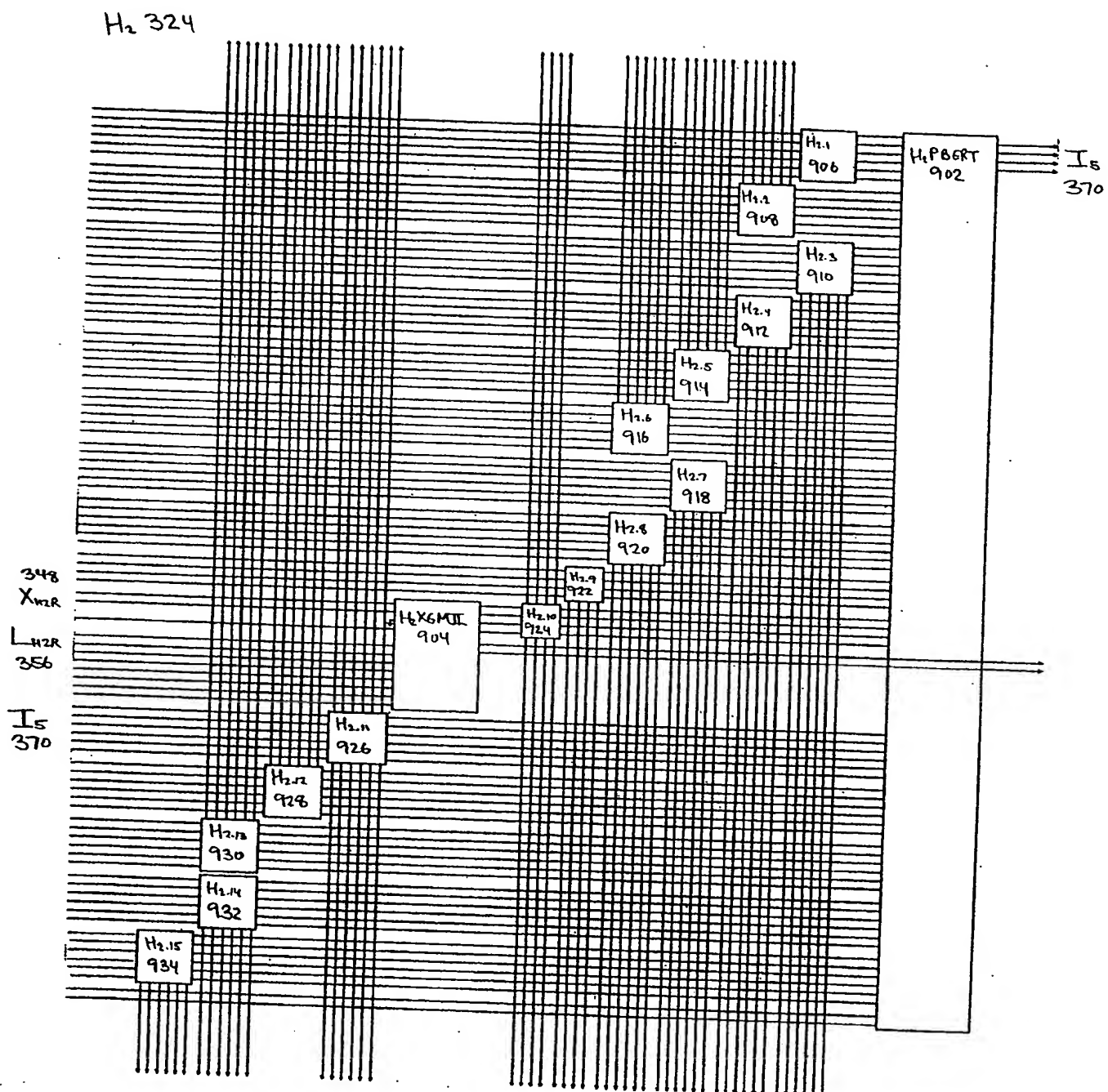
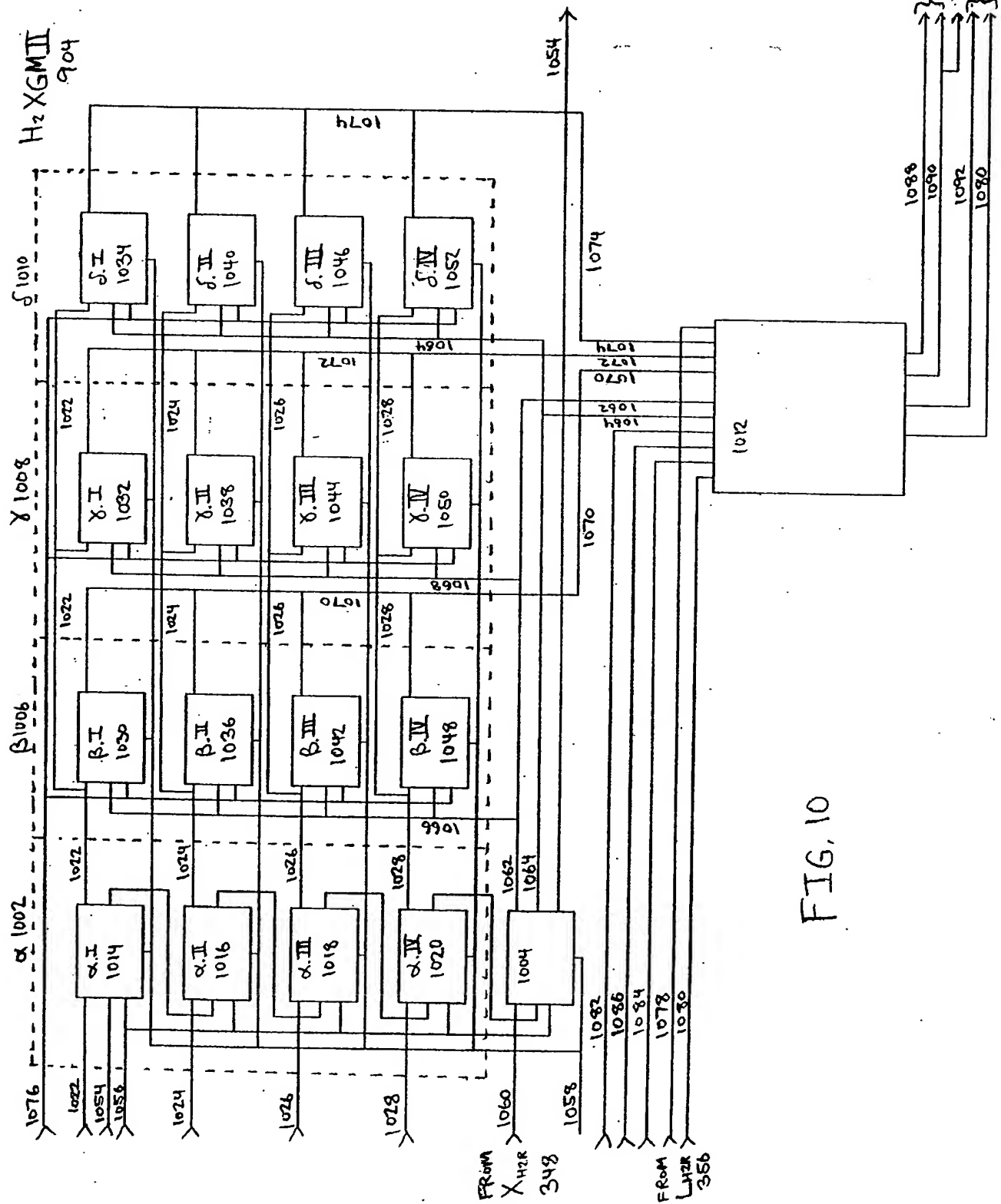


FIG. 9



α.I 1014

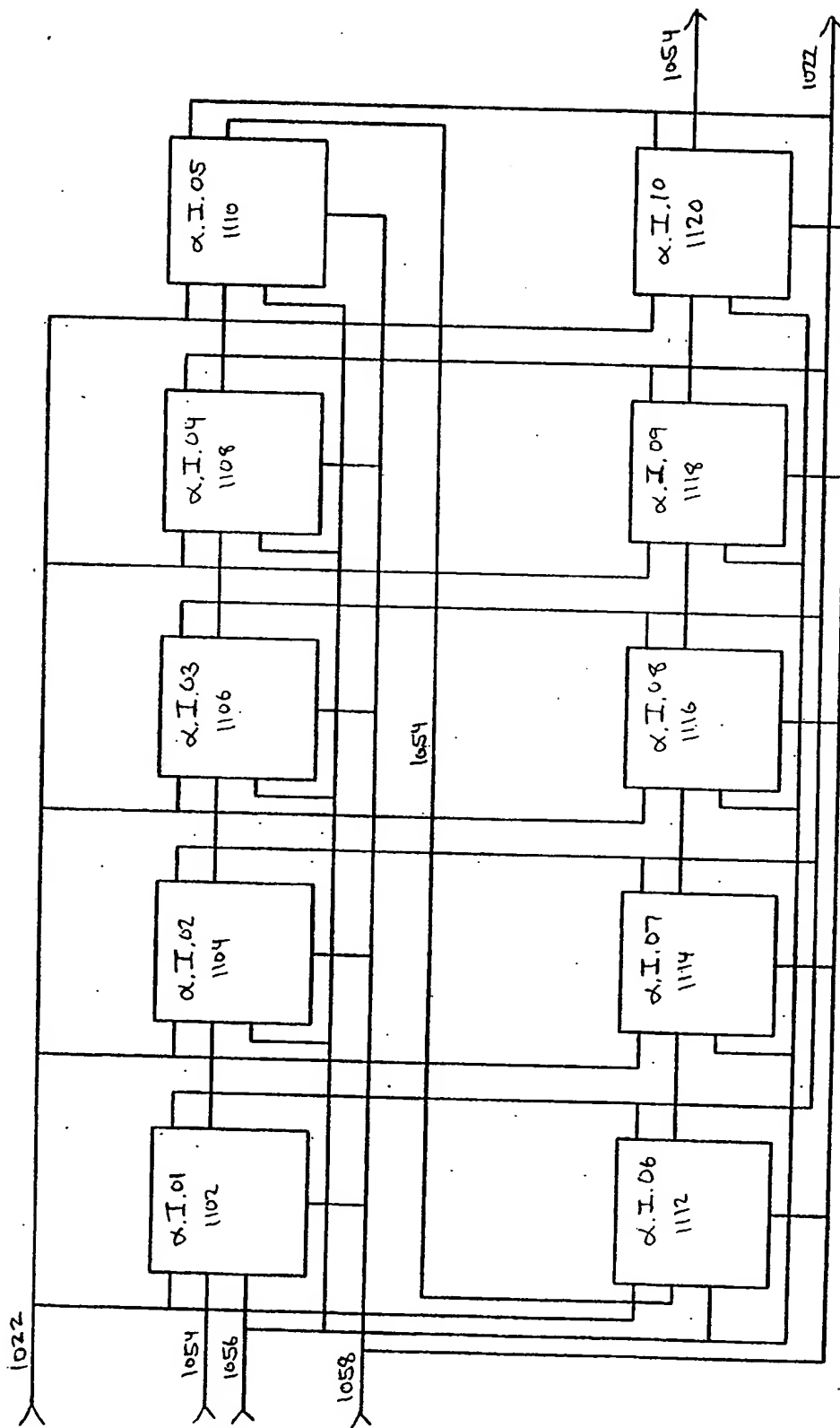


FIG. 11

TRANSMITTER CLOCK AND DELAY CIRCUIT 1004

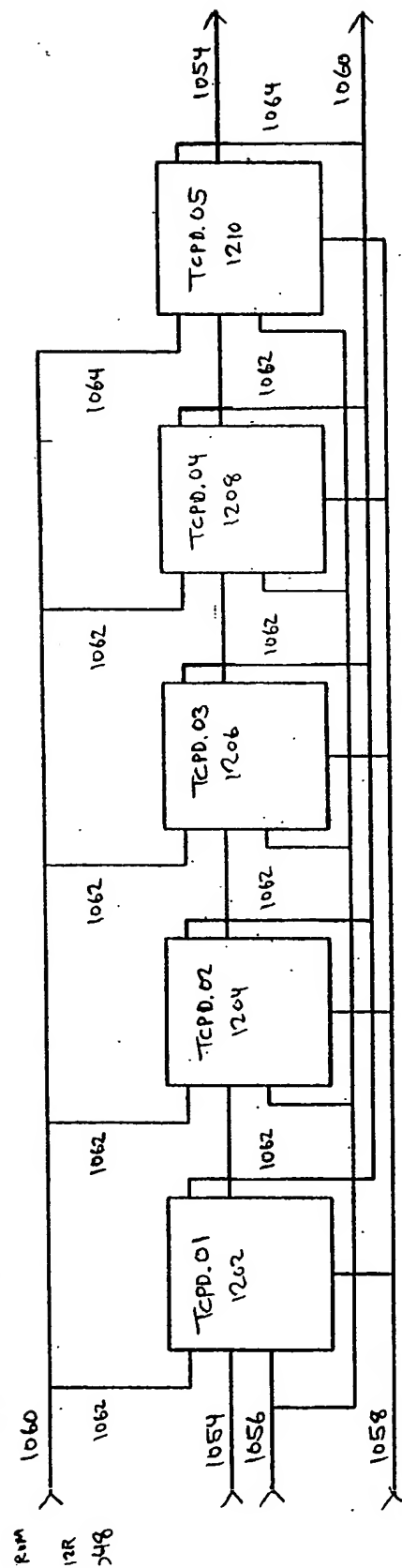


FIG. 12

$\alpha.I.01.1102$

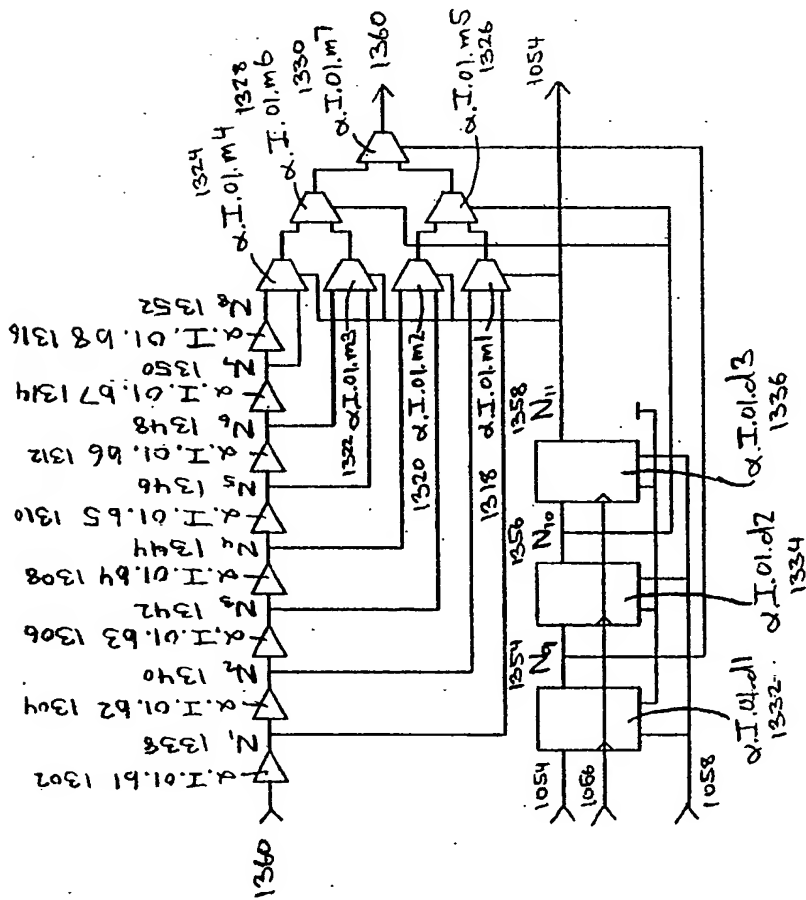


FIG. 13A

FIG. 13B

1380			Output
$N_9$	$N_{10}$	$N_{11}$	
0	0	0	$N_1$
0	0	1	$N_2$
0	1	0	$N_3$
0	1	1	$N_4$
1	0	0	$N_5$
1	0	1	$N_6$
1	1	0	$N_7$
1	1	1	$N_8$

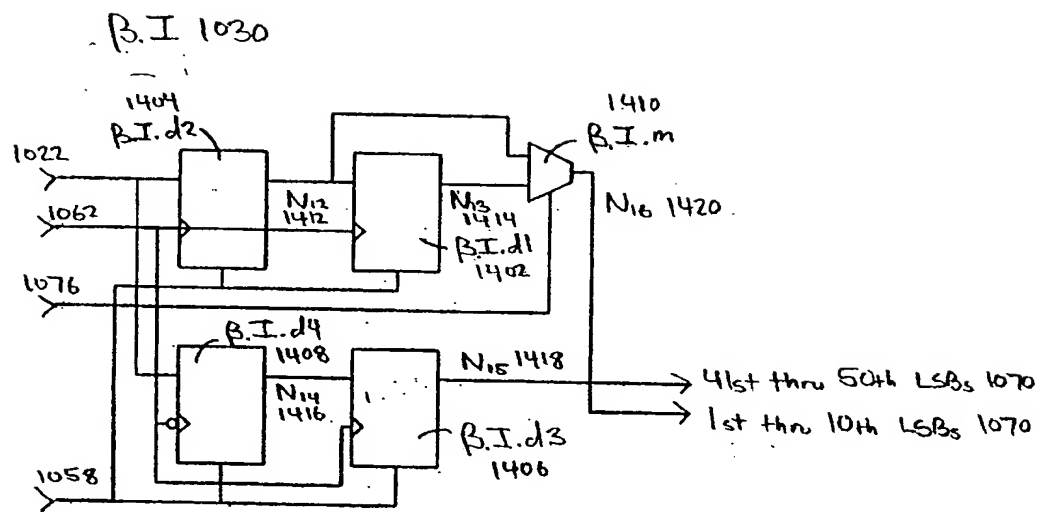
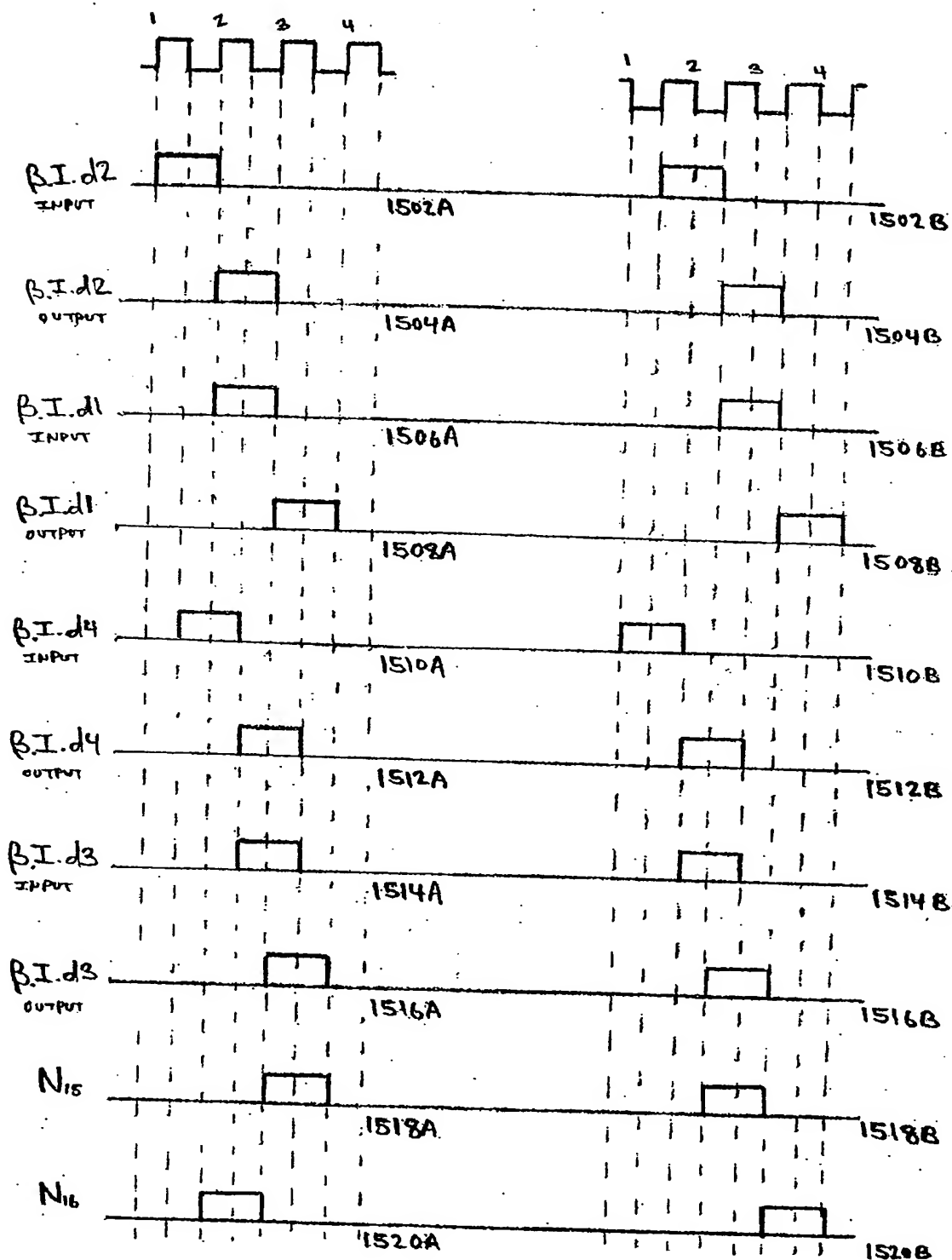


FIG. 14

FIG. 15A  
1500A

FIG. 15B  
1500B





# TRANSMITTER REGISTER MULTIPLEXER 1012

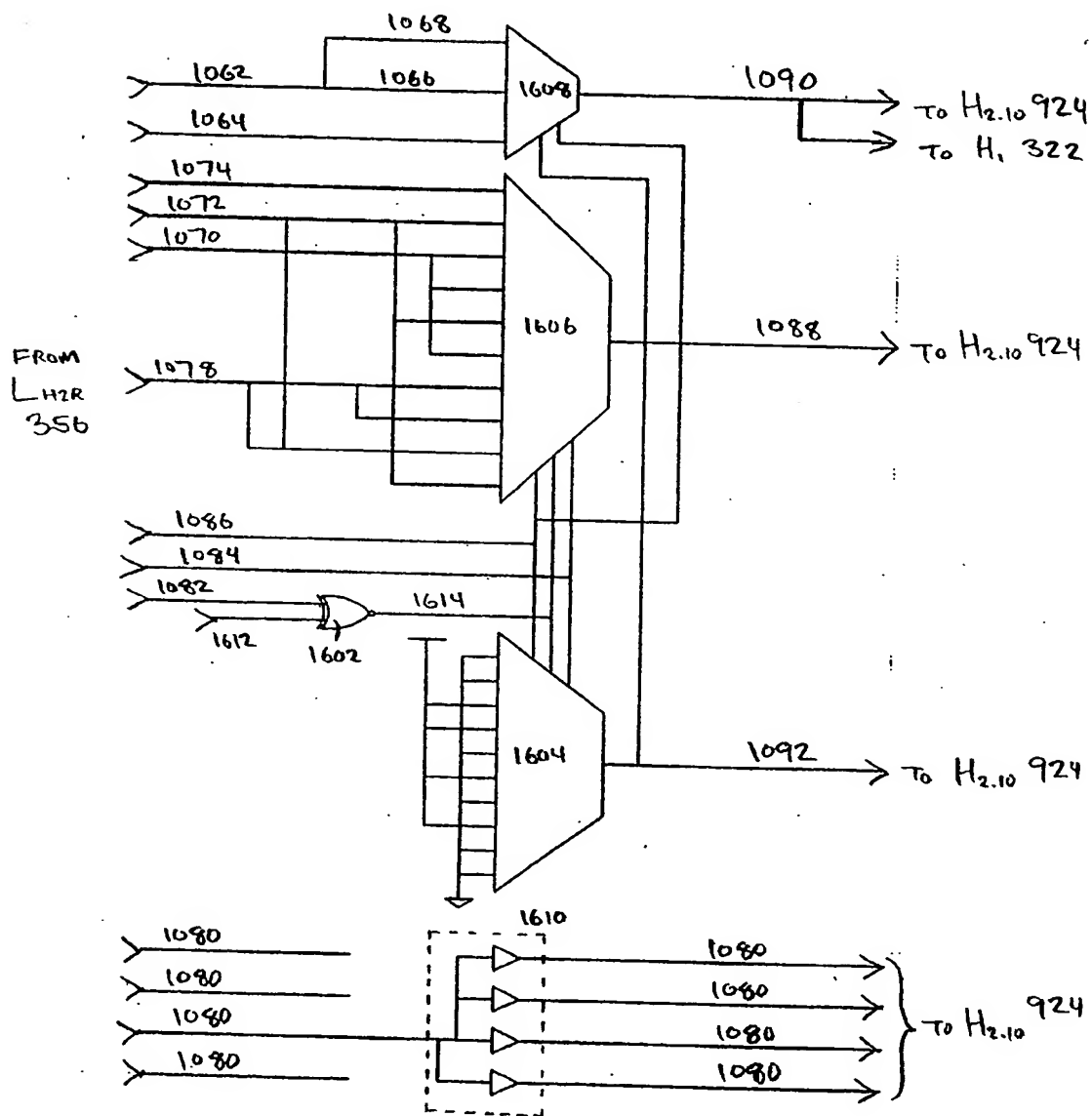
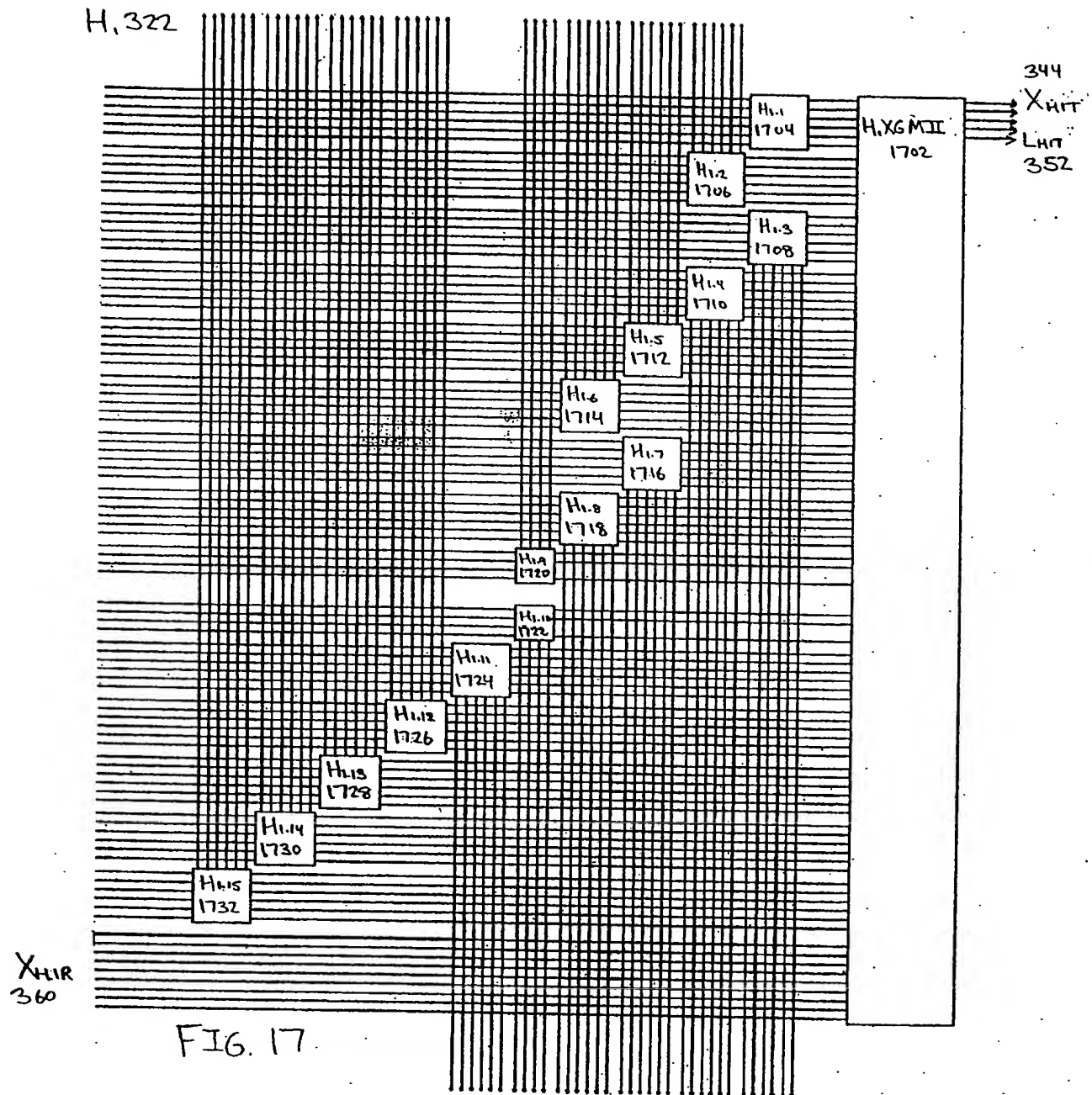
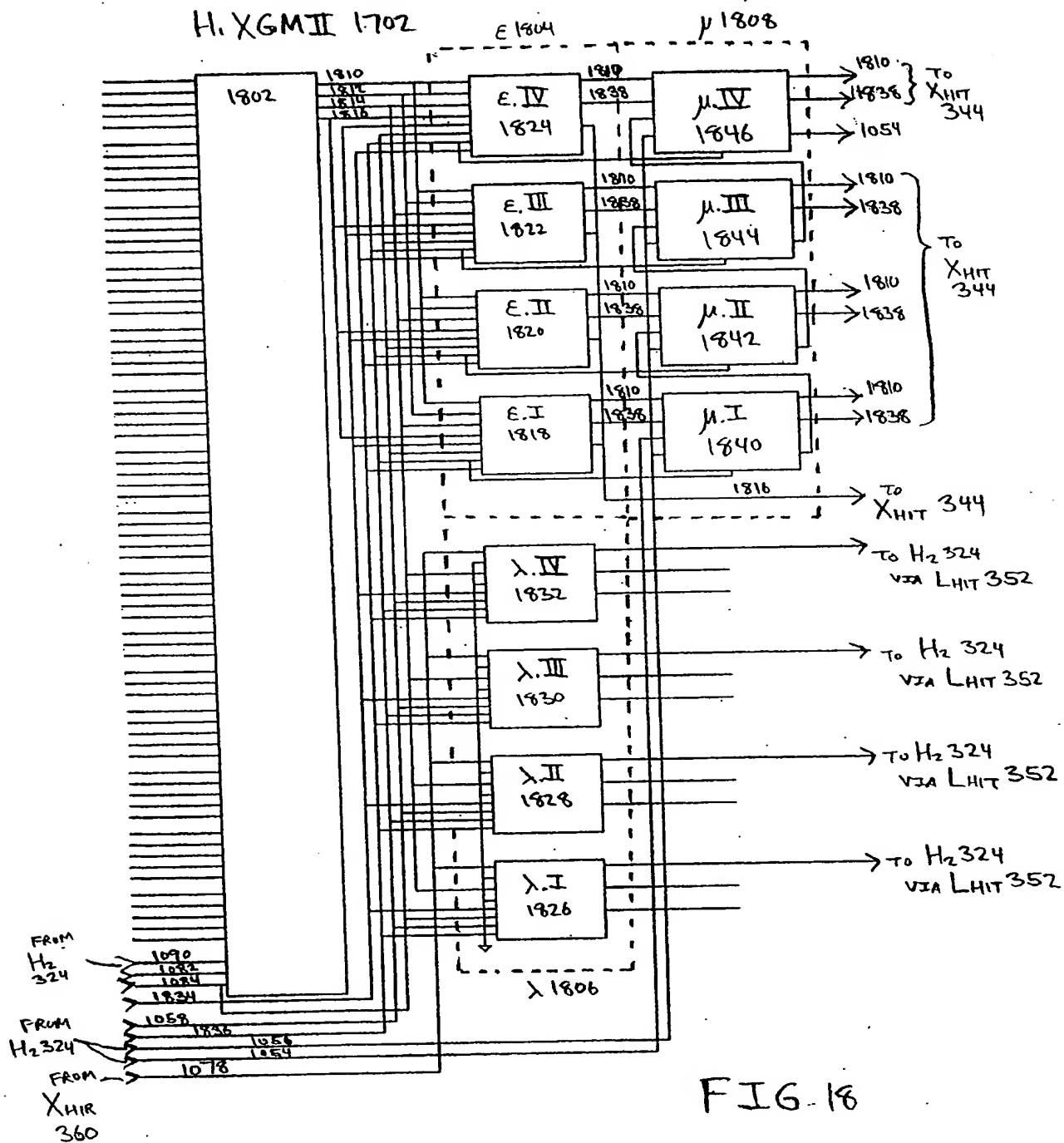


FIG. 16





# RECEIVER AND MULTIPLEXER 1802

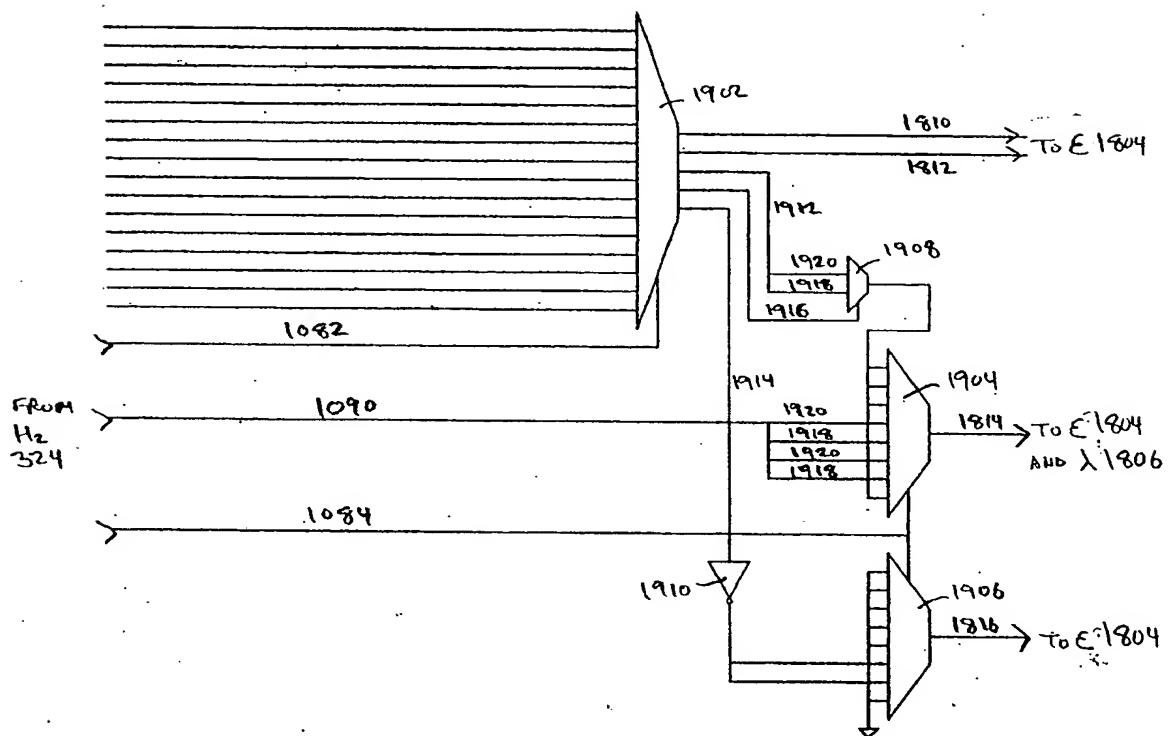


FIG. 19

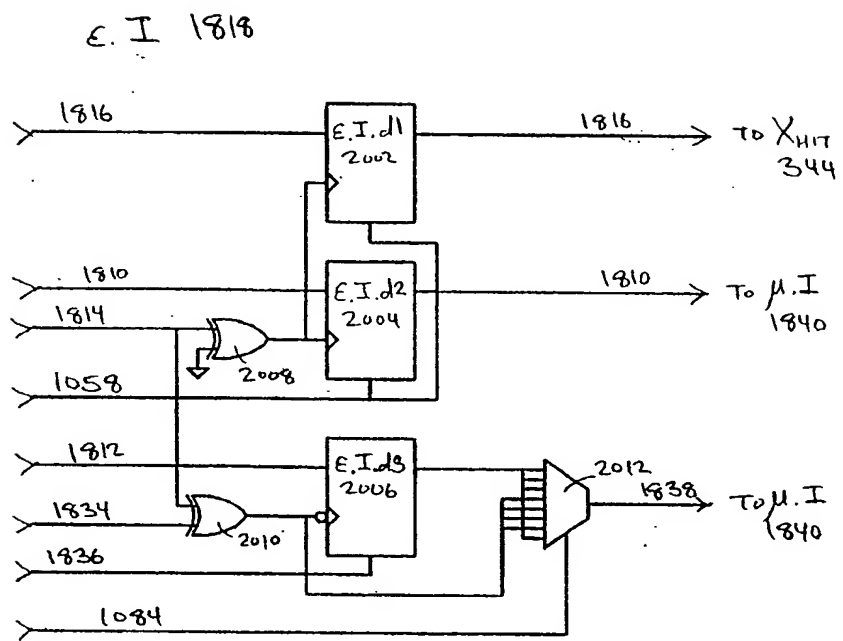


FIG. 20

FIG. 21A  
2100A

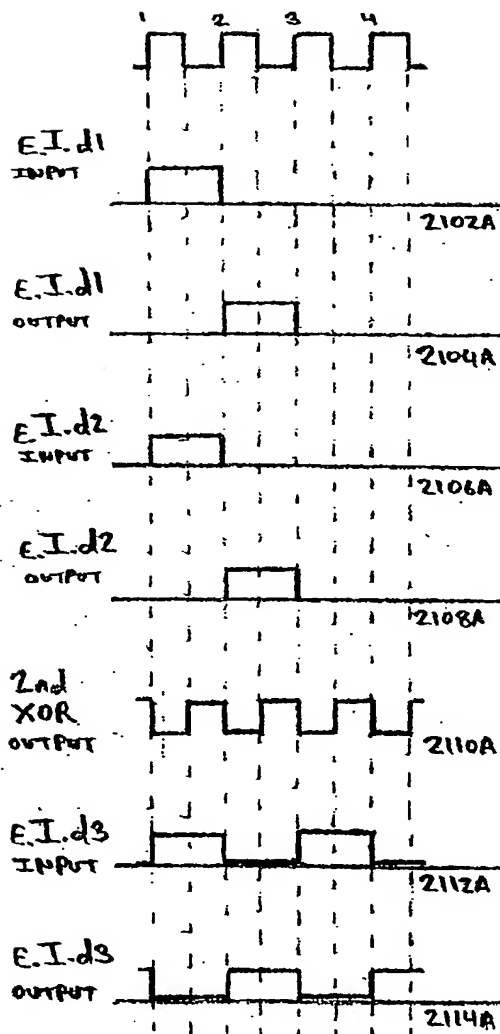
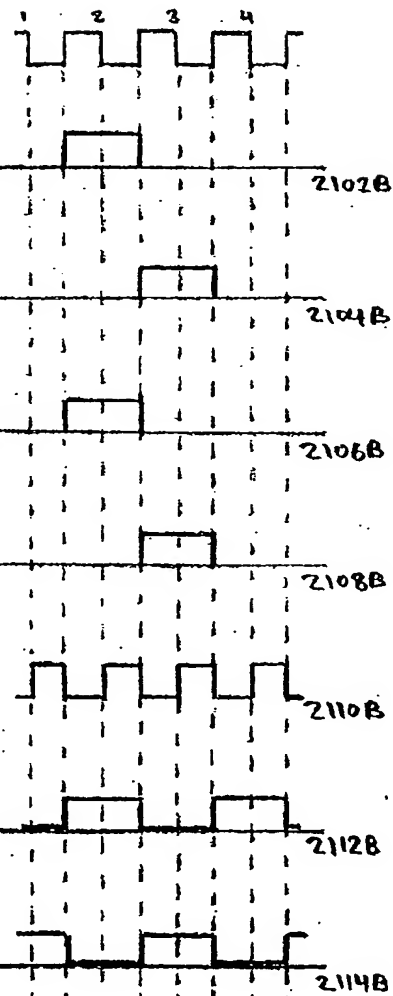


FIG. 21B  
2100B



$\mu.I.1840$

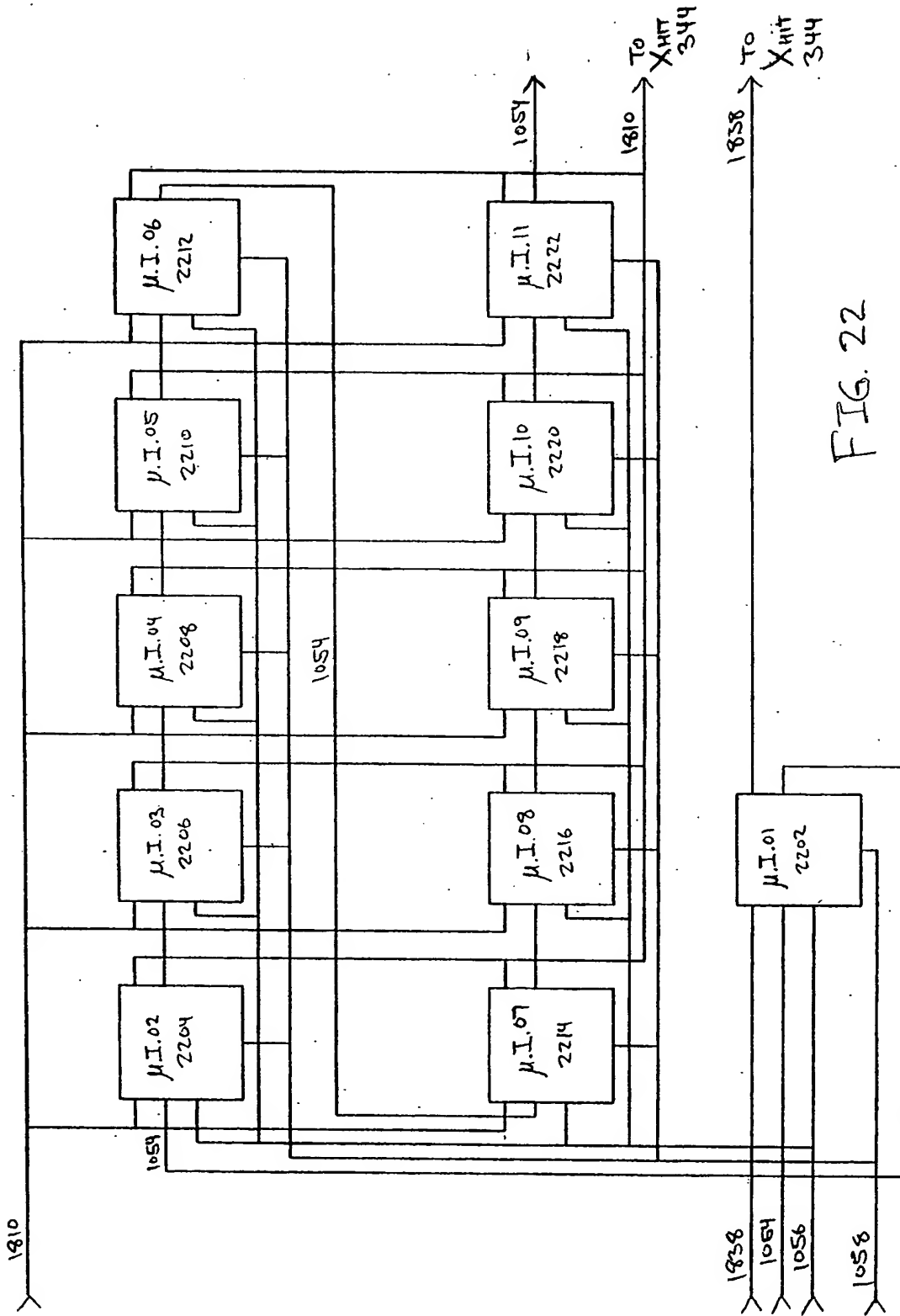


FIG. 22

FIG. 23

2300

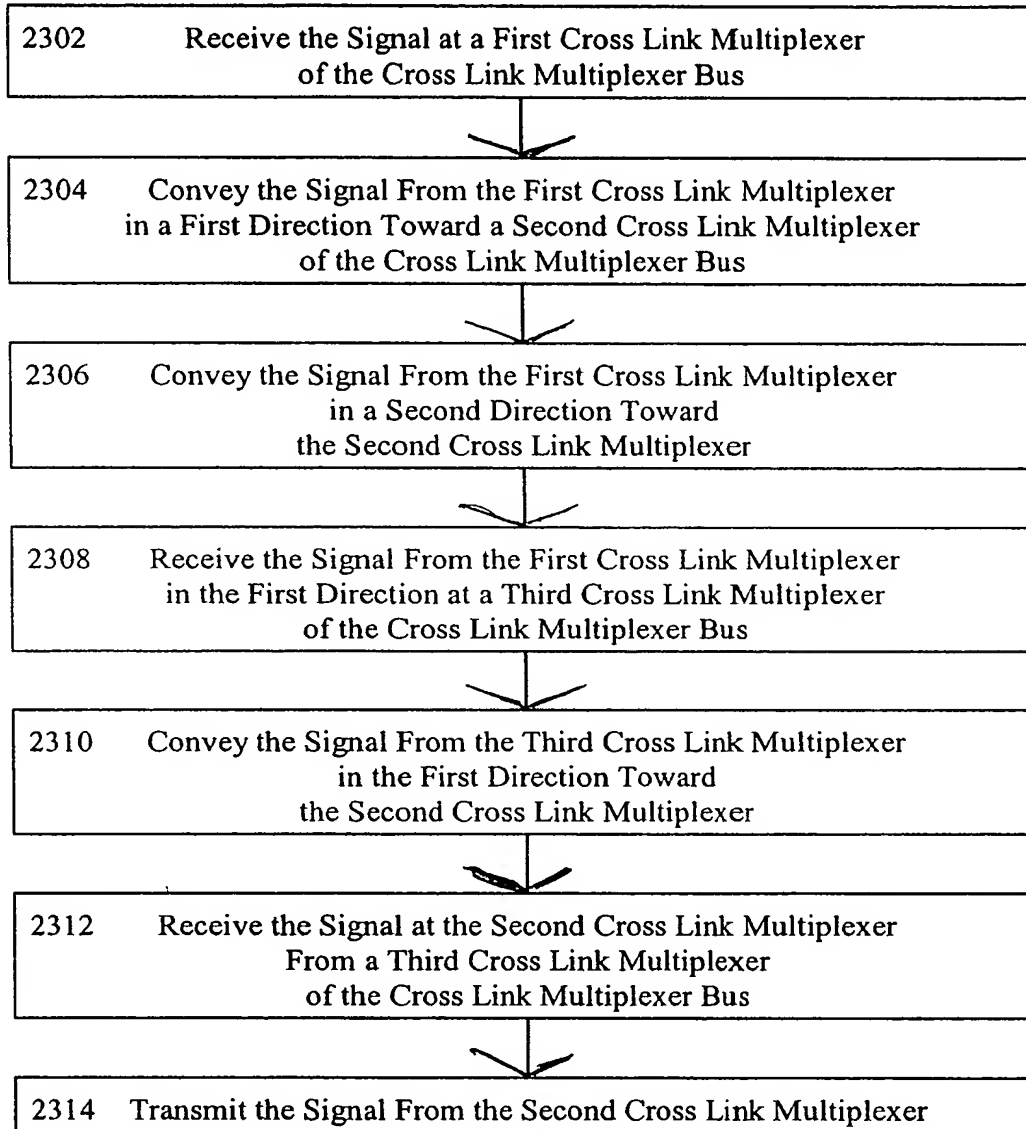




FIG. 24

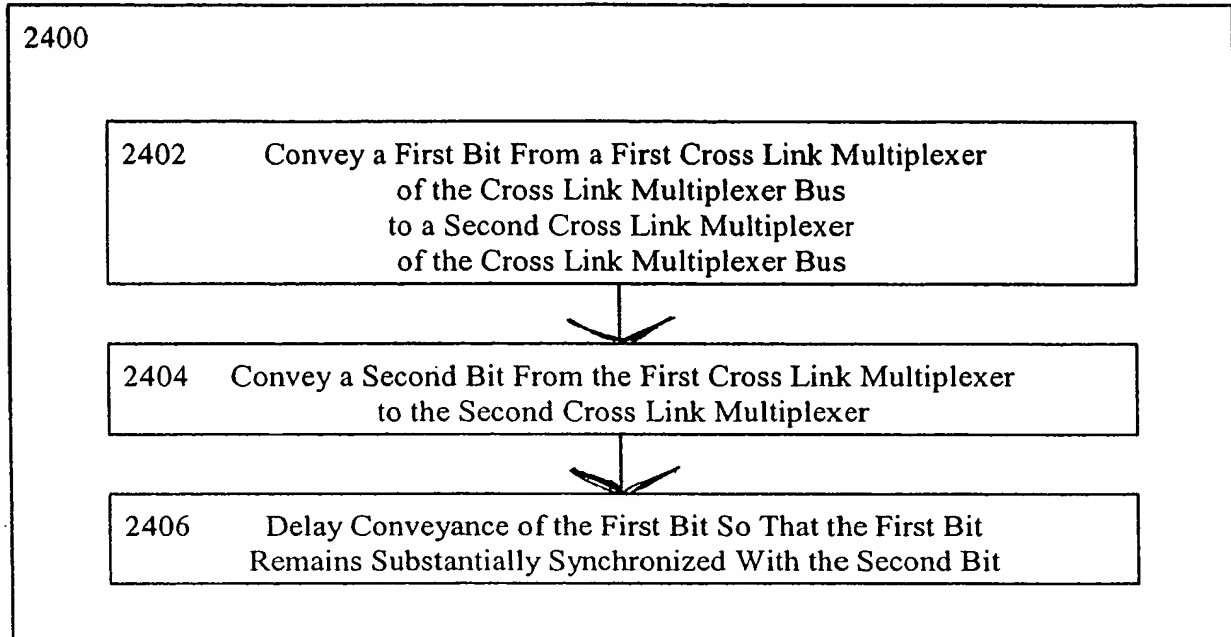


FIG. 25

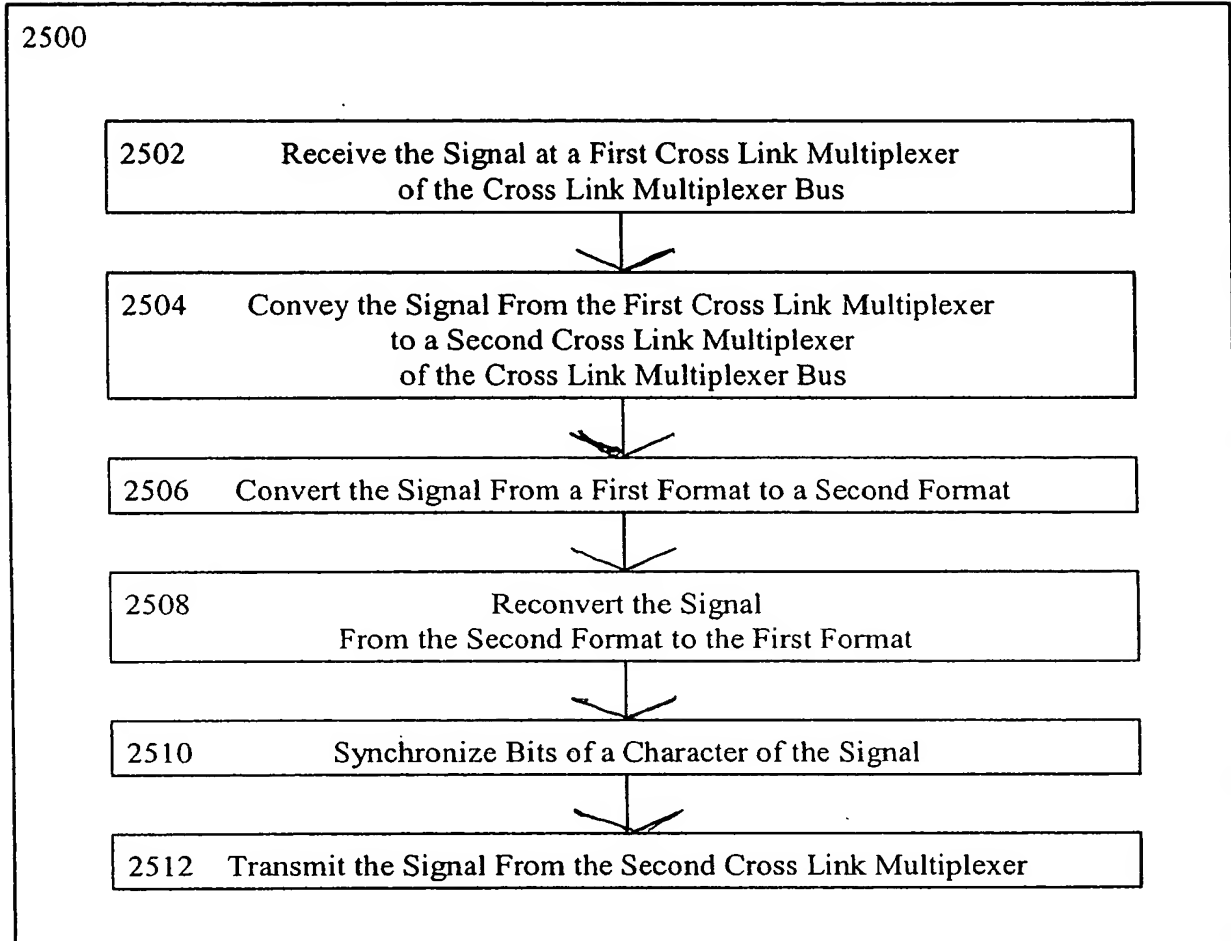


FIG. 26

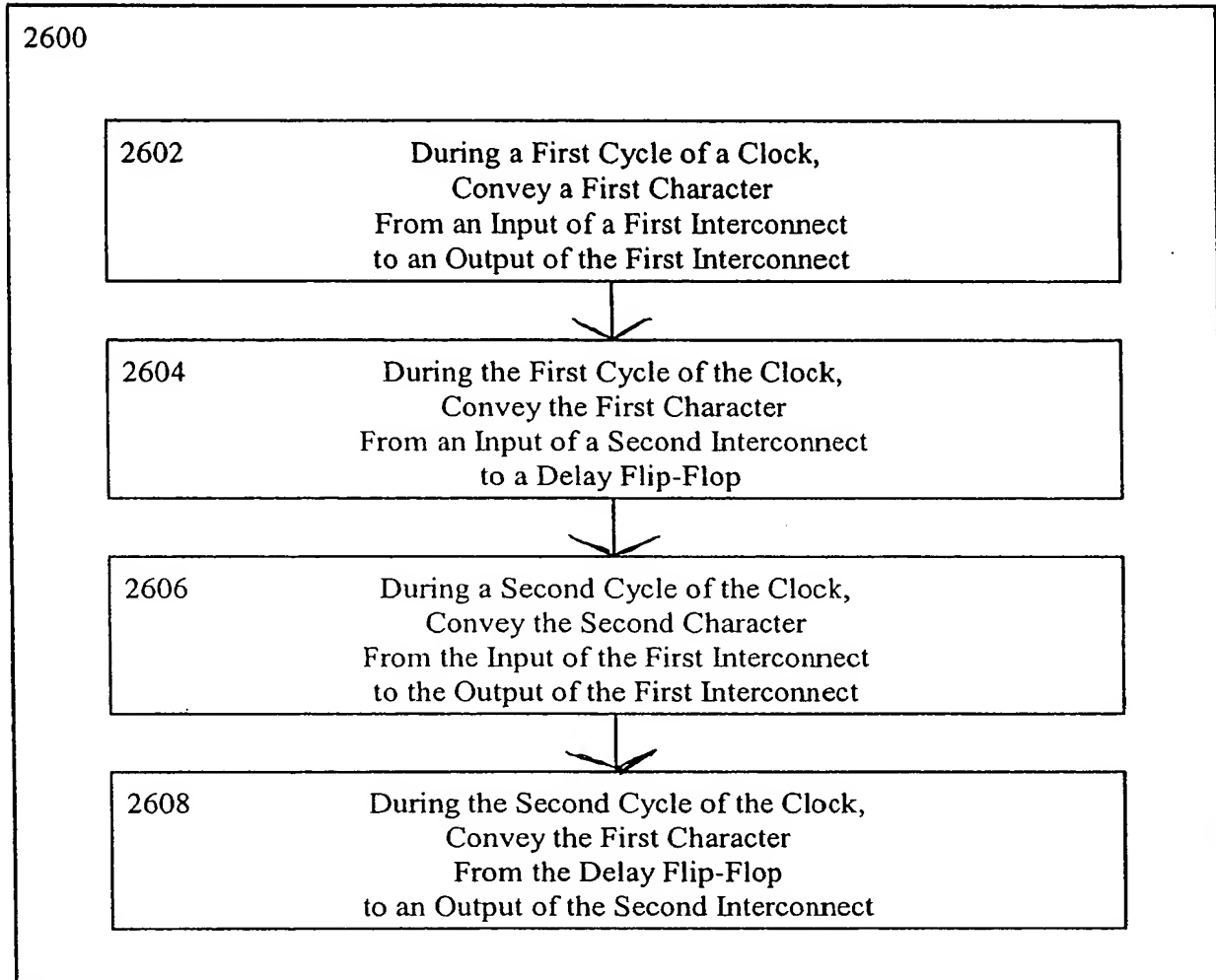


FIG. 27

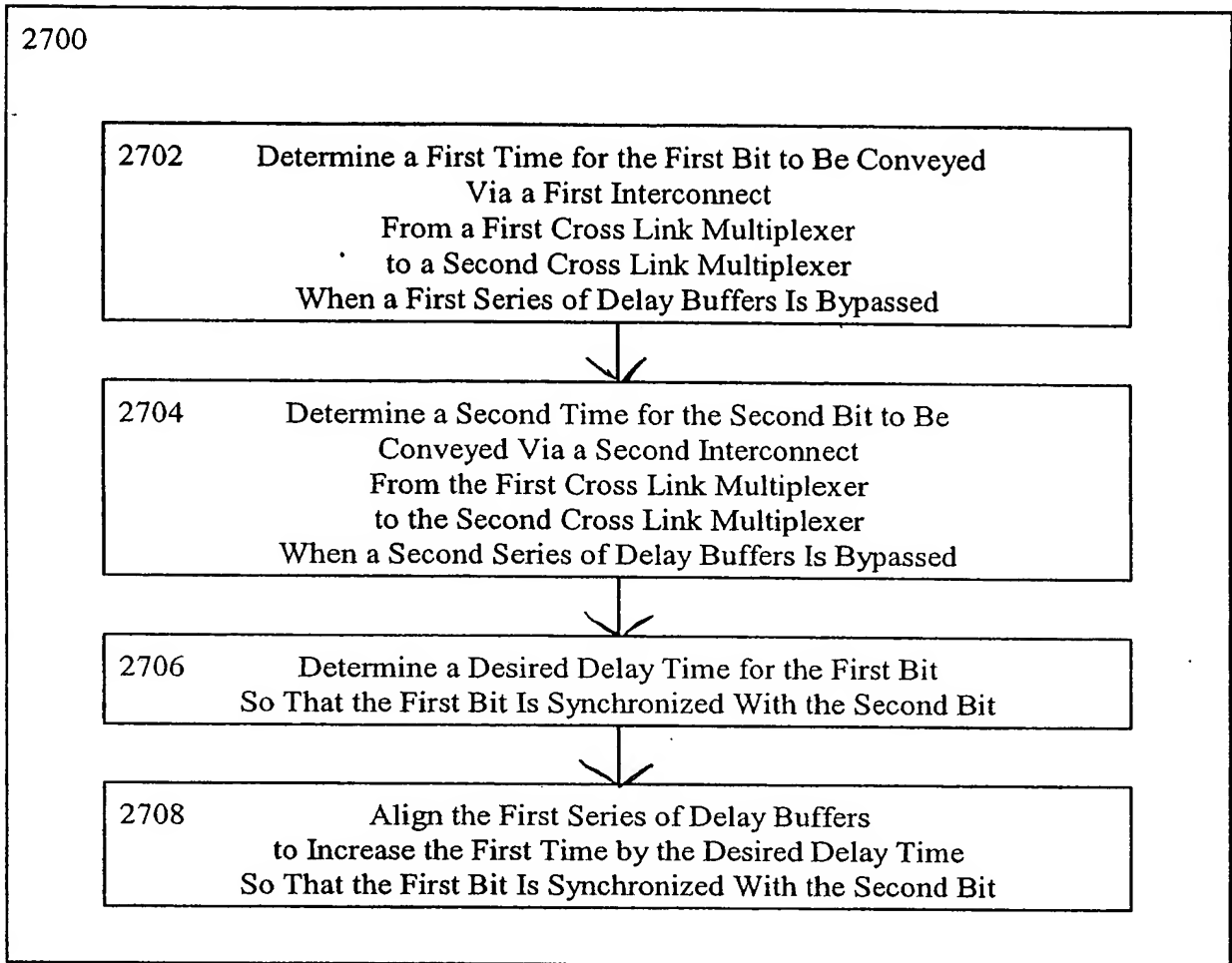


FIG. 28

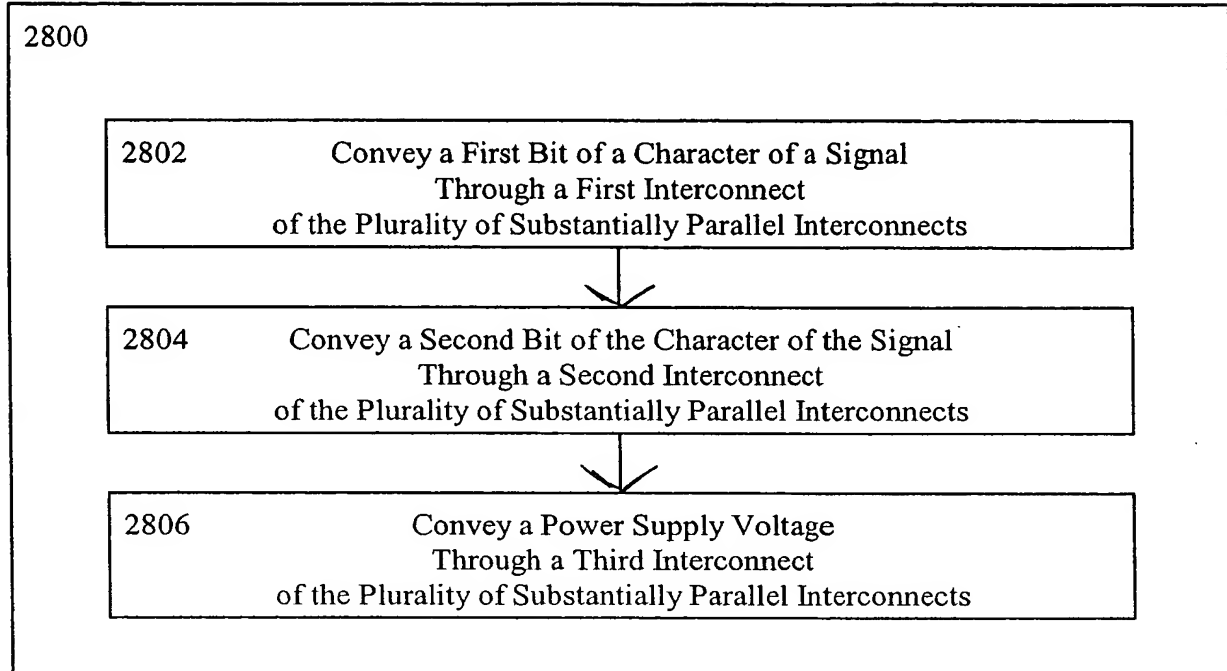


FIG. 29

